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**A NEW *MACROMPHALUS* SPECIES FROM THE BANC D'ARGUIN,  
MAURITANIA (GASTROPODA; VANIKORIDAE)**

KEY WORDS: Gastropoda, Vanikoridae, *Macromphalus* n. sp., Mauritania.

### **Abstract**

Recent investigations off the coast of Mauritania have revealed a new species *Macromphalus tyroi* n.sp. The new species may have been figured by WAREN & BOUCHET (1988, fig. 29).

### **Riassunto**

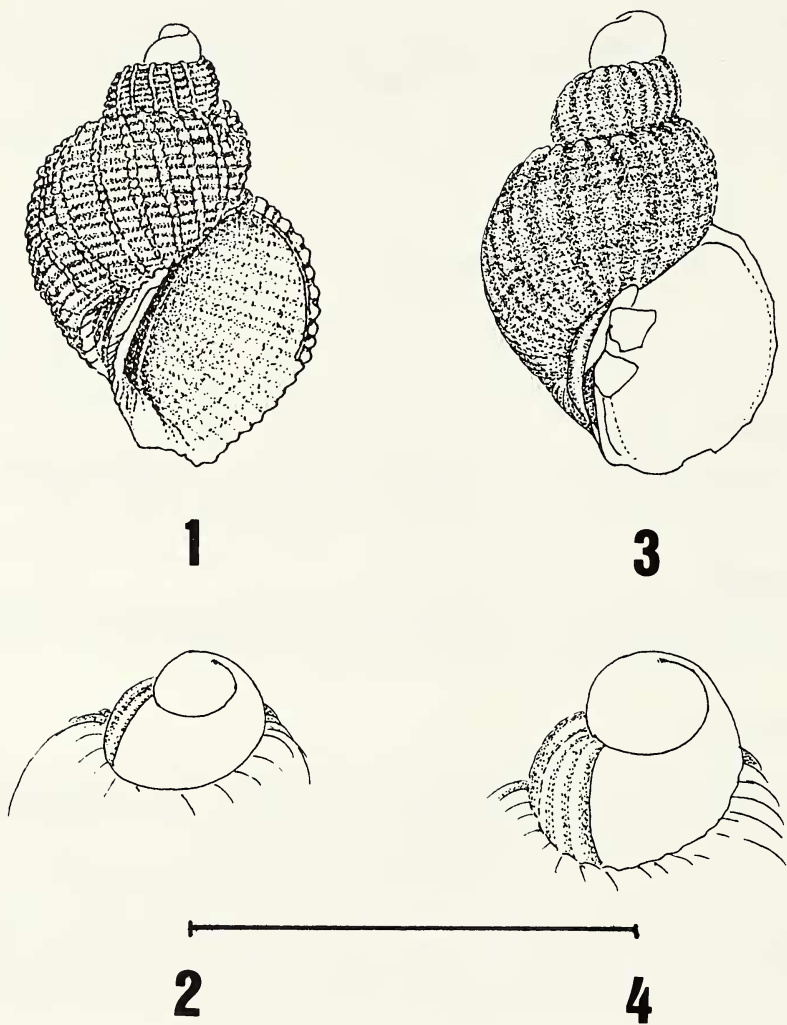
*Macromphalus tyroi* n.sp. è stata identificata da recenti presso le coste della Mauritania. La nuova specie può essere quella raffigurata da WARÈN & BOUCHET (1988, fig. 29).

### **Introduction**

In May 1988, investigations by the Netherlands Institute for Sea Research (NIOZ, Texel) and the Delta Institute (Yerseke, now Nederlands Instituut voor Oecologisch Onderzoek) using the research vessel «Tyro» in the Banc d'Arguin [Tyro Mauritania II Expedition], have revealed an unknown *Macromphalus* species. It may be the same species as that figured by WARÈN & BOUCHET (1988, fig. 29) from off Gorée, Senegal. These authors critically reviewed the Atlantic species of the genus *Macromphalus* and concluded that this genus should be transferred from the family Fossaridae to the Vanikoridae. The new species from Mauritania is described below.

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Figs 1-2. *Macromphalus tyroi* n.sp.; holotype, Mauritania, Banc d'Arguin. 1: ventral view, length 2.55 mm, width 1.75 mm. 2: protoconch [measure bar 1 mm].

Figs 3-4. *Macromphalus reticulatus* (Wood, 1842), syntype (BMNH), Coralline Crag. 3: ventral view, length 2.4 mm, width 1.5 mm. 4: protoconch [measure bar 1 mm].

## ***Macromphalus tyroi* n.sp. (Figs 1-2)**

**DESCRIPTION OF HOLOTYPE** (Fig. 1): Shell thin, fragile, semitransparent, ovate with high aperture and well developed umbilicus. Length 2.55 mm, width 1.75 mm. Subadult. Protoconch of 1 1/4 whorls, height 0.3 mm, with microsculpture of minute tubercles. About 2 3/4 postnuclear whorls, which are convex and separated by a deep suture. Sculpture of spirals and strong dominant opisthocline axial ribs. First postnuclear whorl (pnw) with about 14 spirals and 16 axial ribs. Body whorl with 21 spirals and 20 axials. Height of aperture 1.5 mm, ovate with a thin outer lip. Umbilicus distinct but narrow, demarcated from the spirally and axially striated bodywhorl by a strong basal keel.

Strong axial, close set growth lines internally.

Colour: White, translucent.

**VARIABILITY OF PARATYPES:** Axial sculpture variable. In some specimens it is less prominent and especially in larger specimens it becomes indistinct towards the aperture. The largest adult specimen measures 3.6 mm in length.

**TYPE LOCALITY:** Mauritania, Banc d'Arguin, coastal area near Iwik Sta. VII (20 10'N-17 30'W), 23 May 1988. Leg. Delta Institute, Yerseke. [Tyro Mauritania II Expedition].

**TYPE MATERIAL STUDIED:** Apart from the holotype we have studied 8 paratypes from the type sample (Sta. VII). Shells collected during the same Expedition, but from different stations around Iwik are considered paratypes. We studied: Baie d'Awati, Sta. 1 (2 shells); N.W. off Cap Iwik, Sta. II (1 shell). Stat. V (10 shells); near Ile Kisone, Sta. 3 (1 shell); N.W. off Cap Iwik, Sta. 9 (2 shells). All material was collected by the Delta Institute, Yerseke and NIOZ, Texel and has been deposited in the Zoological Museum Amsterdam (ZMA). Apart from these paratypes we studied two samples collected by the same vessel during the Mauritania Expeditions, 1988, located in the Natural History Museum, Leyden, the Netherlands. Two paratypes from St. MAU. 172 (20° 21'N-17°W) and one paratype from Sta. MAU. 121 (20° 27'N-17°14'W).

**DISCUSSION:** JEFFREYS (1885) proposed a nomen nudum *Fossarus interjunctus* for a recent species dredged by the «Porcupine» Expedition 1870, South West of Tangiers. However, he was convinced that it was identical to the fossil *Lacuna reticulata* Wood, 1842 from the Coralline Crag, so he put his manuscript name in synonymy.

*Macromphalus tyroi* n.sp. seems to be closely related to *M. reticulatus* (Wood, 1842). We studied syntypes of the latter (BMNH no. G 2058/3-4) (fig. 3) and noticed that it has a more bulbous and larger protoconch (fig. 4) and that the base of the aperture is more rounded.

Using the SEM we could see no microsculpture on the protoconch but do not completely exclude that this may have been caused by abrasion. As these fossil shells are very fragile we preferred to make a drawing (fig. 3)

from one of the two best preserved syntypes (coated in glue to strengthen them) instead of making SEM pictures. *M. tyroi* n.sp. may be identical to the shell of «*Fossarus interjunctus*» but according to the rule of the ICZN, that name is invalid. Also JEFFREYS (1885) statement «umbilicus none, except ad regards a slight depression at the base», does not describe the slender but strong umbilicus in *M. tyroi* n.sp. *Macromphalus abylenis* WARÉN & BOUCHET, 1988 differs in lacking the strong axial ribs. Also the postnuclear whorls are more convex than in *M. tyroi* n.sp.

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